SPEECH SECTION DETECTION APPARATUS

5

ABSTRACT OF THE DISCLOSURE

A speech section detection apparatus capable of
reliably detecting a speech section even in the case of a
10   speech signal with low signal-to-noise ratio. The speech
signal collected by a microphone and amplified by a line
amplifier is converted by an A/D converter into a digital
value, which is then stored in a memory. After removing
noise from the digitized speech signal, the signal-to-
15   noise ratio is improved by taking short-time auto-
correlation and, when the signal level has continued to
stay above a threshold value for a predetermined period,
it is determined that a speech section has been detected.
Further, a prescribed period before and after the thus
20   determined speech section is also forcefully set as a
target for extraction so that the beginning and end of
the speech section can be reliably detected.
Furthermore, to prevent noise from accumulating and
causing the threshold value to increase excessively, the
25   threshold value is updated as appropriate by multiplying
a moving average taken over a prescribed period in a non-
speech section by a predetermined factor, and by setting
the resulting product as the threshold value.